INSTRUCTIONS-REPAIR

309409E

Important Safety Instructions
Read all warnings and instructions in this manual. Save These instructions.

GMax® 3900, 5900, 5900HD Airless Paint Sprayers

3300 psi (227 bar, 22.7 MPa) Maximum Working Pressure

GMax 3900

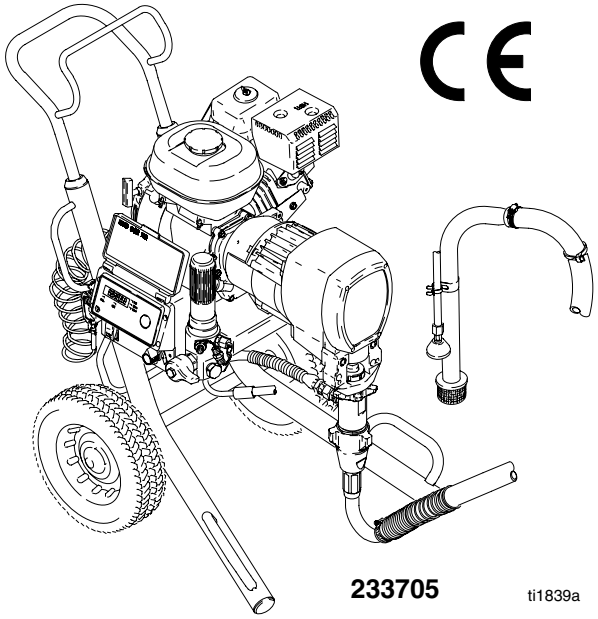
Model	Series	Description
233701	A	Hi-Boy
233703	A	Hi-Boy with RAC® X tip, gun and hose
233700	A	Lo-Boy
233702	A	Lo-Boy with RAC X tip, gun and hose

GMax 5900

Model	Series	Description
233706	A	Hi-Boy
233708	A	Hi-Boy with RAC X tip, gun and hose
233705	A	Lo-Boy
233707	A	Lo-Boy with RAC X tip, gun and hose

GMax 5900HD

Model	Series	Description
233716	A	Hi-Boy
233717	A	Hi-Boy with RAC X tip, gun and hose



233705 ti1839a

All models are not available in all countries

PATENTS PENDING

Related Manuals

Operation 309408
Displacement Pump 309277
Spray Gun 309639
Texture Spray Gun 308491
Spray Tip 309640
PC Board 309459
Drain Valve Kit 308961

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Table of Contents

Warnings and Cautions 2
Maintenance 5
Troubleshooting 6
Repair
- Bearing Housing & Connecting Rod 8
- Drive Housing 9
- Pinion Assembly/Rotor/Field/Shaft/Clutch 10
- Clamp 12
- Clutch Housing 13
- Engine 13
- Pressure Control 15
- Displacement Pump 17

Parts
- GMax 3900 & GMax 5900 Hi-Boy Sprayers 18
- Pinion Assembly 20
- GMax 3900 & GMax 5900 Lo-Boy Sprayers 22
- Pressure Control 24
- Complete Sprayers 26

Dimensions 27
Technical Data 27
Graco Warranty 28

Warnings and Cautions

Warning Symbol

⚠ WARNING

This symbol alerts you to the possibility of serious injury or death if you do not follow the instructions.

Caution Symbol

⚠ CAUTION

This symbol alerts you to the possibility of damage to or destruction of equipment if you do not follow the instructions.

⚠ WARNING

INJECTION HAZARD

Spray from the spray tip, hose leaks or ruptured components can inject fluid into your body and cause extremely serious injury, including the need for amputation. Splashing fluid in the eyes or on the skin can also cause can also cause serious injury.

- Fluid injected into the skin might look like just a cut, but it is a serious injury. **Get immediate medical attention.**
- Do not point the spray tip at anyone or any part of the body.
- Do not put hand or fingers over the spray tip, and do not stop or deflect fluid leaks with your hand, body, glove or rag.
- Do not “blow back” fluid; this is not an air spray system.
- Always have the tip guard and the trigger guard on the in-line valve when spraying.
- Be sure the trigger safety lever operates before operating the in-line valve.
- Lock the trigger safety lever when you stop spraying.
- Follow the **Pressure Relief Procedure** on page 5 when you are instructed to relieve pressure; stop spraying; check, clean, or service any system equipment; or install or change spray tips.
- Tighten all fluid connections before each use.
- Check the hoses, tubes and couplings daily. Replace worn or damaged parts immediately. Permanently coupled hoses cannot be repaired.
- Handle and route hoses and tubes carefully. Keep hoses and tubes away from moving parts and hot surfaces. Do not use the hoses to pull equipment. Do not expose Graco hoses to temperatures above 150°F (65°C) or below –40°F (–40°C).

TOXIC FLUID HAZARD

Hazardous fluids or toxic fumes can cause a serious injury or death if the fluid is swallowed or splashed in the eyes or on the skin or if the fumes are inhaled.

- Know the specific hazards of the fluid you are using.
- Store hazardous fluid in an approved container. Dispose hazardous fluid according to all local, state and national guidelines.
- Dress appropriately for your application. Wear protective eyewear, noise protection for the ears, a personal respirator, gloves, and clothing.

RECOIL HAZARD

Due to the high pressure fluid emitted, a strong recoil action may occur when you trigger the pole gun. If you are unprepared, your hand could be forced back toward your body or you could lose your balance and fall, resulting in serious injury.

⚠ WARNING

FIRE AND EXPLOSION HAZARD

Improper grounding, poor air ventilation, open flames, or sparks can cause a hazardous condition and result in fire or explosion and serious injury.

- Ground the equipment and the object being sprayed. See **Electrical Grounding** on page .
- Provide fresh air ventilation to avoid the buildup of flammable fumes from solvent or the fluid being sprayed.
- Extinguish all the open flames or pilot lights in the spray area.
- Electrically disconnect all the equipment in the spray area.
- Keep the spray area free of debris, including solvent, rags, and gasoline.
- Do not turn on or off any light switch in the spray area while operating or if fumes are present.
- Do not smoke in the spray area.
- Do not operate a gasoline engine in the spray area.
- If there is any static sparking while using the equipment, **stop spraying immediately**. Identify and correct the problem.

EQUIPMENT MISUSE HAZARD

Equipment misuse can cause the equipment to rupture, malfunction, or start unexpectedly and result in serious injury.

- This equipment is for professional use only.
- Read all instruction manuals, tags, and labels before operating the equipment.
- Use the equipment only for its intended purpose. If you are uncertain about the usage, call your distributor.
- Do not alter or modify this equipment. Use only genuine Graco parts and accessories.
- Check the equipment daily. Repair or replace worn or damaged parts immediately.
- Do not exceed the maximum working pressure of the lowest rated system component. This equipment has a **3600 psi (25 MPa, 248 bar) maximum working pressure.**
- Route the hoses away from the traffic areas, sharp edges, moving parts, and hot surfaces. Do not expose Graco hoses to temperatures above 150°F (65°C) or below –40°F (–40°C).
- Do not use the hoses to pull the equipment.
- Use fluids or solvents that are compatible with the equipment wetted parts. See the **Technical Data** section of all the equipment manuals. Read the fluid and solvent manufacturer's warnings.
- Fluid hoses must have spring guards on both ends to protect them from rupture caused by kinks or bends near the couplings.
- Comply with all applicable local, state and national fire, electrical and other safety regulations.
- Wear hearing protection when operating this equipment.

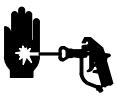
HAZARD OF USING FLUIDS CONTAINING HALOGENATED HYDROCARBONS

Never use 1,1,1-trichloroethane, methylene chloride, other halogenated hydrocarbon solvents or fluids containing such solvents in this equipment. Such use could result in a serious chemical reaction, with the possibility of explosion, which could cause death, serious injury and/or substantial property damage.

Consult your fluid suppliers to ensure that the fluids being used are compatible with aluminum and zinc parts.

Maintenance

⚠ WARNING



INJECTION HAZARD
The system pressure must be manually relieved to prevent the system from starting or spraying accidentally. Fluid under high pressure can be injected through the skin and cause serious injury. To reduce the risk of an injury from injection, splashing fluid, or moving parts, follow the **Pressure Relief Procedure** whenever you:

- are instructed to relieve the pressure,
- stop spraying,
- check or service any of the system equipment,
- or install or clean the spray tip.

Pressure Relief Procedure

1. Lock gun trigger safety.
2. Turn engine ON/OFF switch to OFF.
3. Move pump switch to OFF and turn pressure control knob fully counterclockwise.
4. Unlock trigger safety. Hold metal part of gun firmly to side of grounded metal pail, and trigger gun to relieve pressure.
5. Lock gun trigger safety.
6. Open pressure drain valve. Leave valve open until ready to spray again.

If you suspect that the spray tip or hose is completely clogged, or that pressure has not been fully relieved after following the steps above, VERY SLOWLY loosen tip guard retaining nut or hose end coupling to relieve pressure gradually, then loosen completely. Now clear tip or hose.

⚠ CAUTION

For detailed engine maintenance and specifications, refer to separate Honda Engines Owner's Manual, supplied.

DAILY: Check engine oil level and fill as necessary.

DAILY: Check hose for wear and damage.

DAILY: Check gun safety for proper operation.

DAILY: Check pressure drain valve for proper operation.

DAILY: Check and fill the gas tank.

AFTER THE FIRST 20 HOURS OF OPERATION: Drain engine oil and refill with clean oil. Reference Honda Engines Owner's Manual for correct oil viscosity.

WEEKLY: Remove air filter cover and clean element. Replace element, if necessary. If operating in an unusually dusty environment: check filter daily and replace, if necessary.

Repack connecting rod (22) top needle bearing after every pump change.

Replacement elements can be purchased from your local HONDA dealer.

WEEKLY: Check level of TSL in displacement pump packing nut. Fill nut, if necessary. Keep TSL in nut to help prevent fluid buildup on piston rod and premature wear of packings.

AFTER EACH 100 HOURS OF OPERATION: Change engine oil. Reference Honda Engines Owner's Manual for correct oil viscosity.

SPARK PLUG: Use only BPR6ES (NGK) or W20EPR–U (NIPPONDENSO) plug. Gap plug to 0.028 to 0.031 in. (0.7 to 0.8 mm). Use spark plug wrench when installing and removing plug.

Troubleshooting

Relieve pressure; page 5.

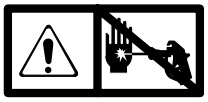
PROBLEM	CAUSE	SOLUTION
E=XX is displayed	Fault condition exists	Determine fault correction from table, page 14.
Engine won't start	Engine switch is OFF	Turn engine switch ON
	Engine is out of gas	Refill gas tank. Honda Engines Owner's Manual.
	Engine oil level is low	Try to start engine. Replenish oil, if necessary. Honda Engines Owner's Manual.
	Spark plug cable is disconnected or damaged	Connect spark plug cable or replace spark plug
	Cold engine	Use choke
	Fuel shutoff lever is OFF	Move lever to ON position
	Oil is seeping into combustion chamber	Remove spark plug. Pull starter 3 to 4 times. Clean or replace spark plug. Start engine. Keep sprayer upright to avoid oil seepage.
False tripping of WatchDog system. **EMPTY** is displayed. Pump does not run.	Operating conditions out of WatchDog parameters Low pump output; page 7.	Turn pressure down. Contact Graco Technical Assistance to adjust WatchDog parameters. Operate without WatchDog active; Manual 309408.
Engine operates, but displacement pump does not operate	Error code displayed?	Reference pressure control repair. Page 15.
	Pump switch is OFF	Turn pump switch ON.
	Pressure setting is too low	Turn pressure adjusting knob clockwise to increase pressure.
	Fluid filter (318) is dirty	Clean filter. Page 24.
	Tip or tip filter is clogged	Clean tip or tip filter. Manual 309091.
	Displacement pump piston rod is stuck due to dried paint	Repair pump. Manual 309277.
	Connecting rod is worn or damaged	Replace connecting rod. Page 8.
	Drive housing is worn or damaged	Replace drive housing. Page 9.
	Electrical power is not energizing clutch field	Check wiring connections. Page 13. Reference pressure control repair. Page 15. Reference wiring diagram. Page 25. With pump switch ON and pressure turned to MAXIMUM, use a test light to check for power between clutch test points on control board. Remove 7–pin connector from control board and measure resistance across clutch coil. At 70° F, the resistance must be between 1.2 ±0.2Ω (GMax 3900); 1.7 ±0.2Ω (GMax 5900); if not, replace pinion housing. Have pressure control checked by authorized Graco dealer.
	Clutch is worn, damaged, or incorrectly positioned	Replace clutch. Page 10.
	Pinion assembly is worn or damaged	Repair or replace pinion assembly. Page 10.

PROBLEM	CAUSE	SOLUTION
Pump output is low	Strainer (31) is clogged	Clean strainer. Sprayer 233716 strainer is for use in paint only.
	Piston ball (206) is not seating	Service piston ball. Manual 309277.
	Piston packings are worn or damaged	Replace packings. Manual 309277.
	O-ring (227) in pump is worn or damaged	Replace o-ring. Manual 309277.
	Intake valve ball is not seating properly	Clean intake valve. Manual 309277.
	Intake valve ball is packed with material	Clean intake valve. Manual 309277. Do not leave 233716 sprayer under pressure for more than 5 minutes when spraying texture and not actively spraying.
	Engine speed is too low	Increase throttle setting. Manual 309408.
	Clutch is worn or damaged	Replace clutch. Page 10.
	Pressure setting is too low	Increase pressure. Manual 309408.
	Fluid filter (318), tip filter or tip is clogged or dirty	Clean filter. Manual 309408 or 309091.
	Large pressure drop in hose with heavy materials	Use larger diameter hose and/or reduce overall length of hose. Use of more than 100 ft of 1/4 in. hose significantly reduces performance of sprayer. Use 3/8 in. hose for optimum performance (50 ft minimum).
Excessive paint leakage into throat packing nut	Throat packing nut is loose	Remove throat packing nut spacer. Tighten throat packing nut just enough to stop leakage.
	Throat packings are worn or damaged	Replace packings. Manual 309277.
	Displacement rod is worn or damaged	Replace rod. Manual 309277.
Fluid is spitting from gun	Air in pump or hose	Check and tighten all fluid connections. Reprime pump. Manual 309408.
	Tip is partially clogged	Clear tip. Manual 309091.
	Fluid supply is low or empty	Refill fluid supply. Prime pump. Manual 309408. Check fluid supply often to prevent running pump dry.
Pump is difficult to prime	Air in pump or hose	Check and tighten all fluid connections. Reduce engine speed and cycle pump as slowly as possible during priming.
	Intake valve is leaking	Clean intake valve. Be sure ball seat is not nicked or worn and that ball seats well. Reassemble valve.
	Pump packings are worn	Replace pump packings. Manual 309277.
	Paint is too thick	Thin the paint according to the supplier's recommendations
	Engine speed is too high	Decrease throttle setting before priming pump. Manual 309408.
Clutch squeaks each time clutch engages	Clutch surfaces are not matched to each other when new and may cause noise	Clutch surfaces need to wear into each other. Noise will dissipate after a day of run time.
High engine speed at no load	Misadjusted throttle setting	Reset throttle to 3700 engine rpm at no load
	Worn engine governor	Replace or service engine governor
Gallon counter not working	Bad sensor, broken or disconnected wire. Displaced or missing magnet.	Check connections. Replace sensor or wire. Reposition or replace magnet.
No display, sprayer operates	Display damaged or has bad connection	Check connections. Replace display.

Bearing Housing and Connecting Rod

NOTE: The item numbers referenced are for the Hi-Boy models. The Lo-Boy models may have different item numbers. Use the Hi-Boy item number and part to find the corresponding Lo-Boy part and item number.

Removal

1.  Relieve pressure**;** page 5.

2. Fig. 2. Remove screws (14) and front cover (23).

3. **For Hi-Boy models;** remove spring clip (32) and drain hose (54). Unscrew suction tube (30) from pump, hold wrench on pump intake valve (A) to keep pump from loosening. **For Lo-Boy models;** unscrew swivel union (30aa) from pump.

4. Disconnect pump outlet hose (33) from displacement pump outlet nipple (62).

5. Fig. 1. Use screwdriver to push up retaining spring (26) at top of pump. Push out pin (29).

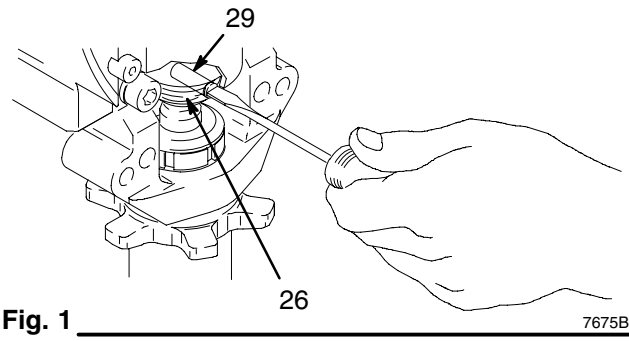


Fig. 1

6. Fig. 2. Loosen retaining nut (34). Unscrew and remove displacement pump (28).

7. Remove four screws (13) and lockwashers (12) from bearing housing (21).

8. Pull connecting rod (22) and lightly tap lower rear of bearing housing (21) with plastic mallet to loosen from drive housing (20). Pull bearing housing and connecting rod assembly (22) off drive housing.

9. Inspect crank (B) for excessive wear and replace parts as needed.

Installation

1. Evenly lubricate inside of bronze bearing (C) in bearing housing (21) with high-quality motor oil. Liberally pack top roller bearing (E), lower bearing (D) inside connecting rod assembly (22) with bearing grease.

2. Assemble connecting rod (22) and bearing housing (21).

3. Clean mating surfaces of bearing and drive housings.

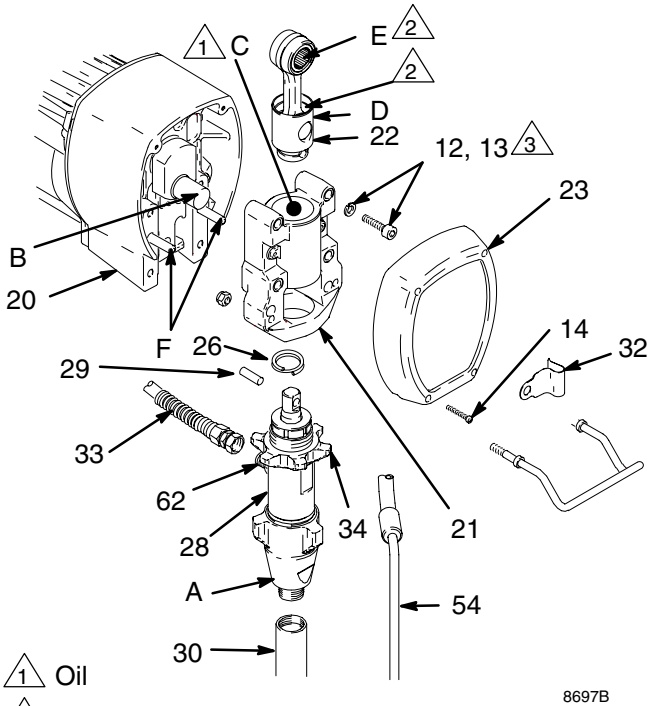
4. Align connecting rod with crank (B) and carefully align locating pins (F) in drive housing (20) with holes in bearing housing (21). Push bearing housing onto drive housing or tap into place with plastic mallet.

⚠ CAUTION

DO NOT use bearing housing screws (13) to align or seat bearing housing with drive housing. Align these parts with locating pins (F), to avoid premature bearing wear.

5. Install screws (13) and lockwashers (12) on bearing housing. Torque evenly to note 3 value in Fig. 2.

6. Refer to Displacement Pump, Installation, page 17.



2 Pack with bearing grease 114819

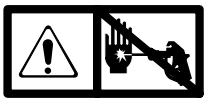
3 GMax 3900: Torque to 200 in-lb (22.6 N·m)
GMax 5900: Torque to 25 ft-lb (34 N·m)

8697A

Fig. 2 **Model 233701 shown**

Drive Housing

Removal

1.  Relieve pressure**;** page 5.

2. Fig. 3. Remove bearing housing. Do 1. through 8. of **Bearing Housing and Connecting Rod** procedure on page 8.

3. Fig. 4. Disconnect gallon counter sensor at (A). **Cut tie wrap holding gallon counting sensor wire to clutch wire.**

4. Fig. 3. Remove two screws (81) and lockwashers (17).

5. Remove four screws (10) and lockwashers (17) from pinion housing (19).

6. Lightly tap around drive housing (20) to loosen drive housing. Pull drive housing straight off pinion housing. Be prepared to support gear cluster (18), which may also come out.

Installation

1. Liberally apply bearing grease (supplied with replacement gear cluster) to gear cluster (18) and to areas called out by note 3. Use full 0.62 pint (0.29 liter) of grease for GMax 3900 and 0.68 pint (0.32 liter) of grease for GMax 5900.

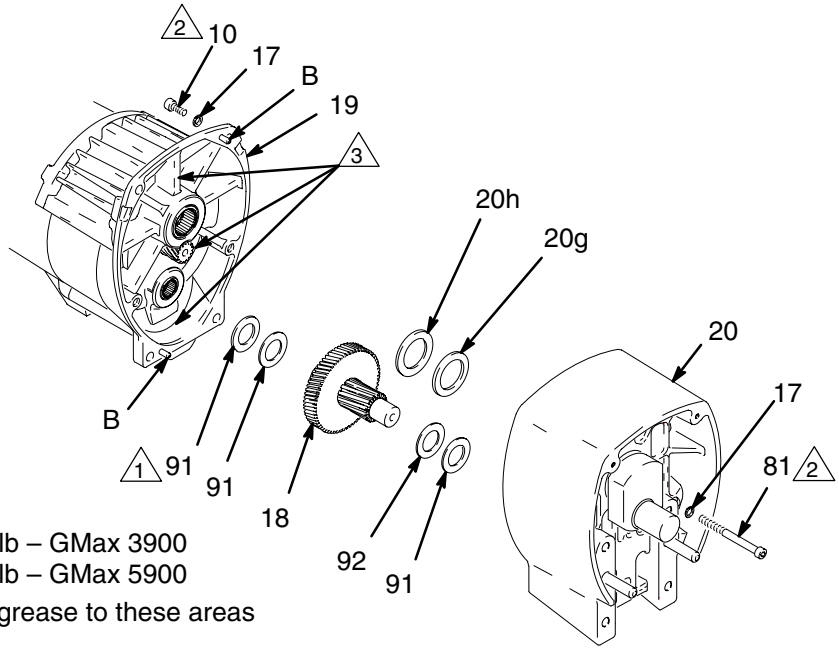
2. Place bronze colored washer (20g) on shaft protruding from large shaft of drive housing (20). Place silver colored washer (20h) on pinion housing. Align gears and push new drive housing straight onto pinion housing and locating pins (B).

3. Install four screws (10) and lockwashers (17) from pinion housing (19).

4. Install two screws (81) and lockwashers (17).

5. Fig. 4. Connect gallon counter sensor at (A). **Secure gallon counting sensor wire to clutch wire with a tie wrap.**

6. Fig. 3. Install bearing housing. Do 1. through 6. of **Bearing Housing and Connecting Rod** procedure on page 8.



1 GMax 3900 only

2 Torque to 125 in-lb – GMax 3900
Torque to 200 in-lb – GMax 5900

3 Apply remaining grease to these areas

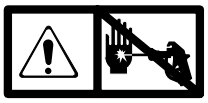
TI0178A

Fig. 3

Pinion Assembly/Rotor/Field/Shaft/Clutch

Removal

If pinion assembly (19) is not removed from clutch housing (5), do 1. through 4. Otherwise, start at 5.

1.  Relieve pressure**;** page 5.
2. Remove drive housing; page 9.
3. Disconnect field cable (X) from pressure control, and gallon counter sensor at (A).

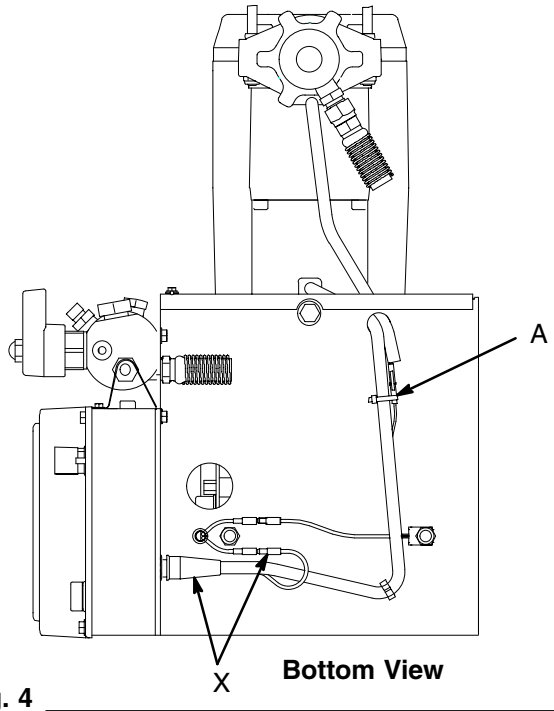


Fig. 4 8699A

4. Fig. 5. Remove five screws (10) and lockwashers (17) and pinion assembly (19).

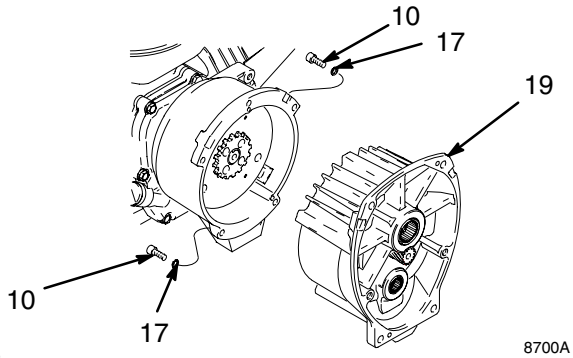


Fig. 5 8700A

5. Fig. 6. Place pinion assembly (19) on bench with rotor side up.
6. Remove four screws (72) and lockwashers (17). Install two screws in threaded holes (E) in rotor. Alternately tighten screws until rotor comes off.

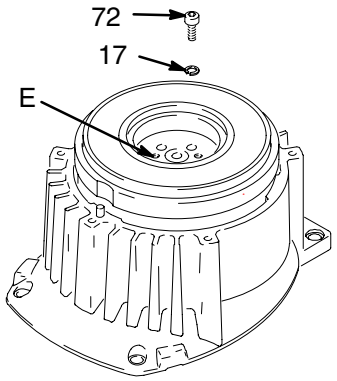
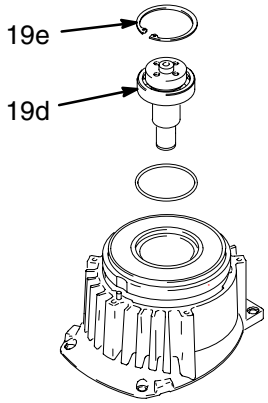


Fig. 6 8701B

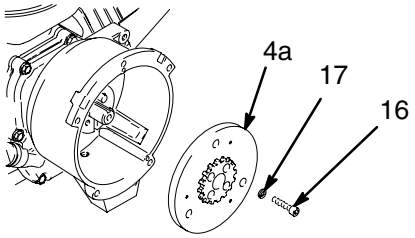
7. Fig. 7. Remove retaining ring (19e).
8. Tap pinion shaft (19d) out with plastic mallet.



8703B

Fig. 7

9. Fig.8. Use an impact wrench or wedge something between armature (4a) and clutch housing to hold engine shaft during removal.
10. Remove four screws (16) and lockwashers (17).
11. Remove armature (4a).



8704A

Fig. 8

Pinion Assembly/Rotor/Field/Shaft/Clutch

Installation

1. Fig. 9. Lay two stacks of two dimes on smooth bench surface.
2. Lay armature (4a) on two stacks of dimes.
3. Press center of clutch down on bench surface.

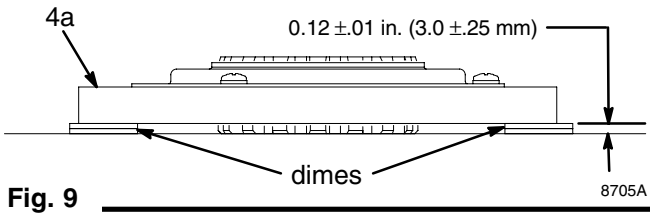


Fig. 9

4. Install armature (4a) on engine drive shaft.
5. Install four screws (16) and lockwashers (17) with torque of 125 in-lb.
6. Fig. 7. Tap pinion shaft (A) in with plastic mallet.
7. Install retaining ring (Z) with beveled side facing field (Y).
8. Fig. 6. Place pinion assembly on bench with rotor side up.
9. Apply Loctite® to screws. Install four screws (16) and lockwashers (17). Alternately torque screws to 125 in-lb until rotor is secure. Use threaded holes to hold rotor.
10. Fig. 5. Install pinion assembly (19) with five screws (10) and lockwashers (17).
11. Fig. 5. Connect field cable (X) to pressure control.

Clamp

Removal

1. Fig. 10. Loosen two screws (16) on clamp (8),
2. Push screwdriver into slot in clamp (8) and remove clamp.

Installation

1. Fig. 10. Install engine shaft key (7).
2. Tap clamp (8) on engine shaft (A) with plastic mallet.
3. Press clamp (8) onto engine shaft (A). Maintain dimension shown note 2 in Fig. 10. Chamfer must face engine.

   Check dimension: Place rigid, straight steel bar (B) across face of clutch housing (5). Use accurate measuring device to measure distance between bar and face of clamp. Adjust clamp as necessary. Torque two screws (16) to 125 ±10 in-lb (14 ±1.1 N·m).

1. Face of clutch housing
2. 1.550 ±.010 in. (39.37 ±.25 mm); GMax 3900
   1.812 ±.010 in. (46.02 ±.25 mm); GMax 5900
3. Torque to 125 ±.10 in-lb (14 ±1.1 N·m)
4. Chamfer this side

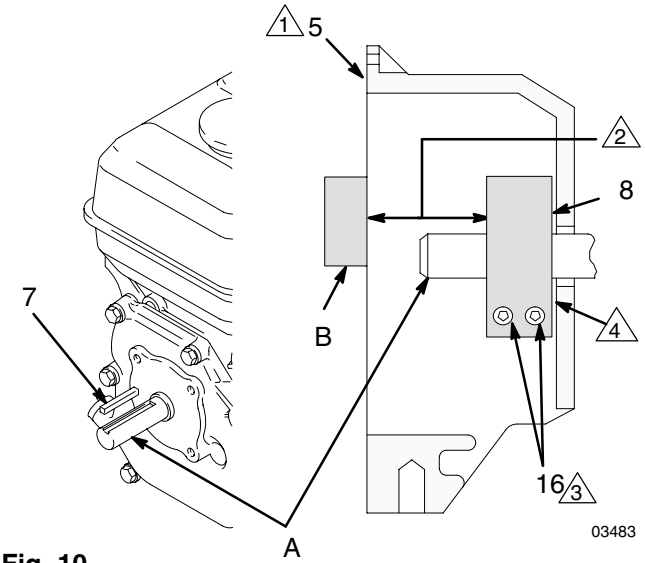


Fig. 10

Clutch Housing

Removal

1. Fig. 11. Remove four capscrews (73) and lockwashers (77) which hold clutch housing (5) to engine.
2. Remove screw (15) from under mounting plate (D).
3. Remove engine key (7).
4. Pull off clutch housing (5).

Installation

1. Fig. 11. Push on clutch housing (5).
2. Install four capscrews (73) and lockwashers (77) and secure clutch housing (5) to engine. Torque to 200 in-lb (22.6 N•m).
3. Install capscrew (15) from beneath mounting plate (D). Torque to 26 ft-lb (35.2 N•m).

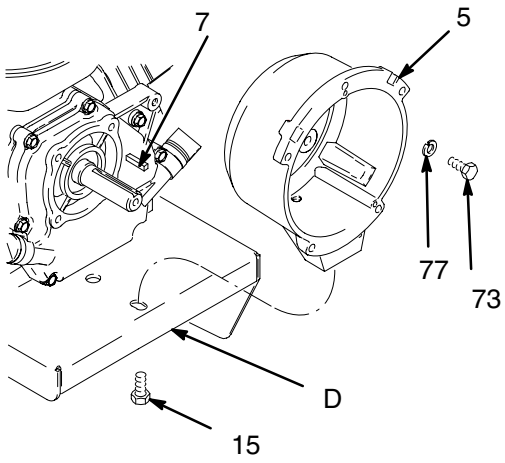


Fig. 11 8708A

Engine

Removal

1. Remove **Pinion Assembly/Rotor/Field/Pinion/ Clutch, Clamp** and **Clutch Housing**, as instructed on pages 10, 12 and 13.
2. Fig. 12. Disconnect all necessary wiring.
3. Fig. 13. Remove two locknuts (71) and screws (70) from base of engine.
4. Lift engine carefully and place on work bench.

NOTE: All service to the engine must be performed by an authorized HONDA dealer.

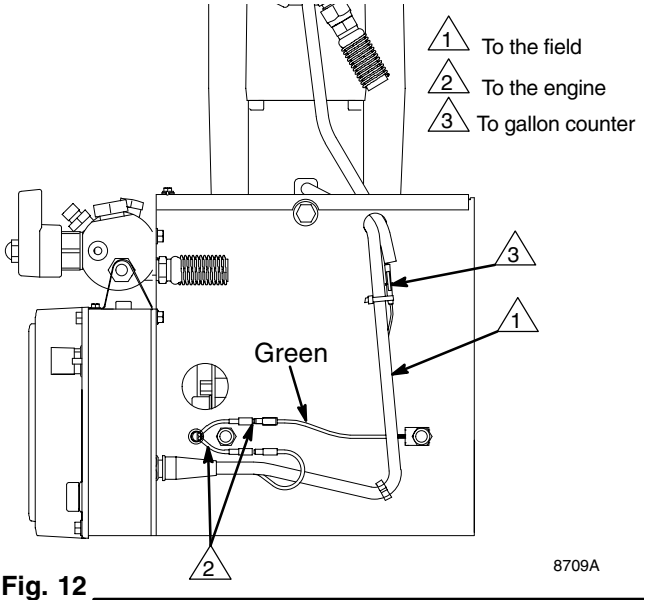


Fig. 12

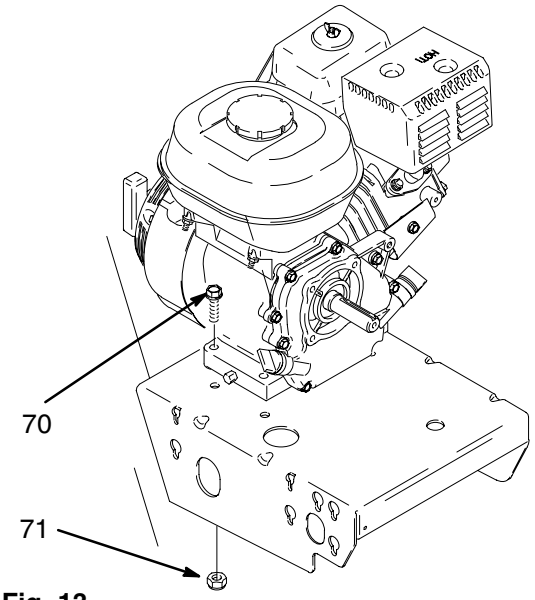


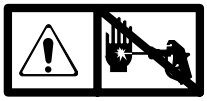
Fig. 13

Installation

1. Lift engine carefully and place on cart.
2. Fig. 13. Install two screws (70) in base of engine and secure with locknuts (71). Torque to 200 in-lb (22.6 N•m).
3. Fig. 12. Connect all necessary wiring.
4. Install **Pinion Assembly/Rotor/Field/Pinion/ Clutch, Clamp** and **Clutch Housing**, as instructed on pages 10 and 12 and 13.

On/Off Switch

Removal

1.  Relieve pressure; page 5.
2. Fig. 14. Remove four screws (28) and display/cover (153).
3. Pull display connector wings (A) open on PC board and pull display connector out.
4. Disconnect ON/OFF switch connector (B) from PC board.
5. Press in on two retaining tabs on each side of ON/OFF switch (47) and remove switch.

Installation

1. Install new ON/OFF switch (47) so tabs of switch snap into place on inside of pressure control housing.
2. Connect ON/OFF switch connector (B) to PC board.
3. Push display connector into PC board close display connector wings (A) on PC board.
4. Install display/cover (153) with four screws (28).

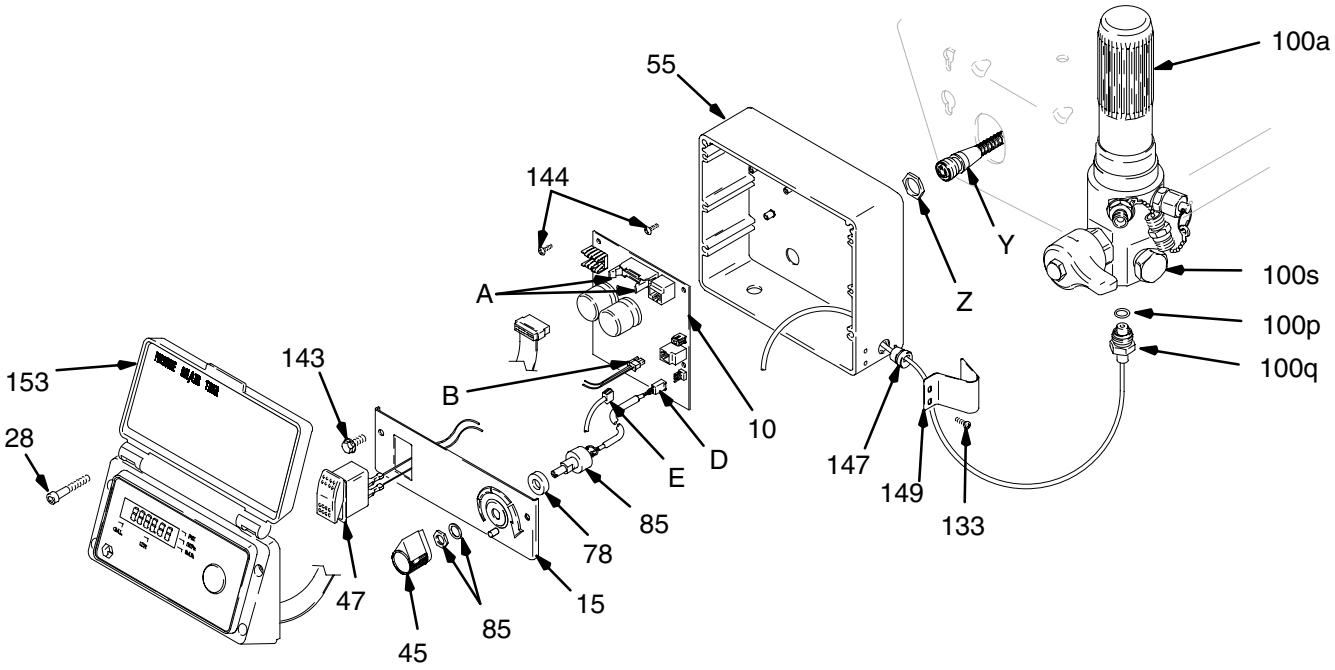
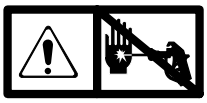


Fig. 14

Pressure Control

Control Board

Removal

1.  Relieve pressure; page 5.
2. Fig. 14. Remove four screws (28) and display/cover (153). Pull display connector wings open on PC board and pull display connector out.
3. Fig. 21. Disconnect at control board (10):
   - Lead (D) from potentiometer.
   - Lead (E) from transducer.
   - Remove ON/OFF switch (47) connector (A).
4. Fig. 14. Remove six screws (144) from control board (10) and green ground wire.
5. Remove connector (Y) at backside of pressure control. Remove jam nut (Z) and control board (10).

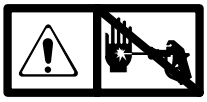
Installation

When installing replacement control board, follow instructions with control board to set model type.

1. Fig. 14. Install control board (10) and jam nut (Z). Install connector (Y) at backside of pressure control.
2. Install green ground wire and control board (10) with six screws (144).
3. Fig. 21. Connect to control board (10):
   - Connect ON/OFF switch (47) connector (A).
   - Lead (E) to transducer.
   - Lead (D) to potentiometer.
4. Fig. 14. Push display connector into PC board close display connector wings on PC board. Install display/cover (153) with four screws (28).

Pressure Control Transducer

Removal

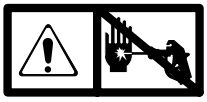
1.  Relieve pressure; page 5.
2. Fig. 14. Remove four screws (28) and display/cover (153).
3. Disconnect lead (E) from control board (10).
4. Remove two screws (133) and transducer guard (149) from control housing (55). Pull transducer connector through rubber grommet (147).
5. Remove pressure control transducer (100q) and o-ring (100p) from filter housing (100e).

Installation

1. Fig. 14. Install o-ring (100p) and pressure control transducer (100q) in filter housing (100e). Torque to 30–36 ft-lb.
2. Install transducer connector and rubber grommet (147) in control housing (55) . Install transducer guard (149) on control housing with two screws (133).
3. Connect lead (E) to motor control board (10).
4. Install display/cover (153) with four screws (28).

Pressure Adjust Potentiometer

Removal

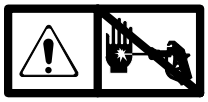
1.  Relieve pressure; page 5.
2. Fig. 14. Remove four screws (28) and display/cover (153).
3. Disconnect lead (D) from control board (10).
4. Loosen set screws on potentiometer knob (45) and remove knob, shaft nut, lockwasher (85) and pressure adjust potentiometer (85).
5. Remove seal (78) from potentiometer (85).

Installation

1. Install seal (78) on potentiometer (85).
2. Fig. 14. Install pressure adjust potentiometer (85), shaft nut, lockwasher (85) and potentiometer knob (45).
   a. Turn potentiometer shaft (85) clockwise to internal stop. Assemble potentiometer knob (45) to strike pin on plate (15).
   b. After adjustment of step a., tighten both set screws in knob 1/4 to 3/8 turn after contact with shaft.
3. Connect lead (D) to control board (10).
4. Install display/cover (153) with four screws (28).

Pressure Control Repair

Digital Display Messages



Relieve pressure before repair**;** page 5. No display does not mean that sprayer is not pressurized.

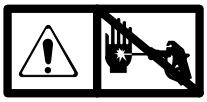
DISPLAY	SPRAYER OPERATION	INDICATION	ACTION
No Display	Sprayer may be pressurized.	Loss of power or display not connected	Check power source. Relieve pressure before repair or disassembly. Verify display is connected.
- - - -	Sprayer may be pressurized.	Pressure less than 200 psi (14 bar, 1.4 MPa)	Increase pressure as needed
3000 **psi** 210 **bar** 21 **MPa**	Sprayer is pressurized. Power is applied. (Pressure varies with tip size and pressure control setting.)	Normal operation	Spray
E-02	Sprayer stops. Engine is running.	Exceeded pressure limit	Remove any filter clogs or flow obstructions. Make sure gun trigger is locked open if using AutoClean valve.
E-03	Sprayer stops. Engine is running.	Pressure transducer faulty, bad connection or broken wire.	Check transducer connections and wire. Replace transducer or control board, if necessary.
E-05	Sprayer stops. Engine is running.	High clutch current	1. Check clutch 7–pin bulkhead connector. Clean contacts. 2. Measure 1.2 ±0.2Ω (GMax 3900); 1.7 ±0.2Ω (GMax 5900) across clutch field at 70°F 3. Replace clutch field assembly
E-06	Sprayer stops. Engine is running. Display alternates E=06.	High clutch temperature	1. If clutch is new, let sprayer cool down and then restart 2. Inspect clutch. Replace clutch if there is excessive wear. 3. Remove pump pin, separate pinion housing from clutch housing. Rotate rotor clockwise to check for excessive drag.
E-07	Sprayer stops. Engine is running.	Pressure greater than 2000 psi (138 bar, 14 MPa) while in Flush Timer Mode	1. Flush paint from hose before operating Flush Timer Mode 2. Verify AutoClean is activated and gun valve and prime valve are open

After a fault, follow these steps to restart sprayer:

1. Correct fault condition
2. Turn sprayer OFF
3. Turn sprayer ON

Displacement Pump

Removal

1. Flush pump.
2.  Relieve pressure; page 5.
3. Fig. 15. Cycle pump with piston rod (222) in its lowest position.
4. Fig. 15. Remove suction tube (30) and hose (33).

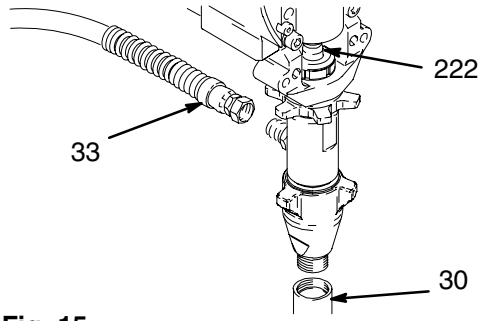


Fig. 15

Repair

See manual 309277 for pump repair instructions.

Installation

⚠ WARNING

If pin works loose, parts could break off due to force of pumping action. Parts could project through the air and result in serious injury or property damage. Make sure pin and retaining spring are properly installed.

⚠ CAUTION

If the pump locknut loosens during operation, the threads of the bearing housing will be damaged. Make sure locknut is properly tightened.

1. Fig. 18. Pull piston rod out 1.5 in. Screw in pump until holes in bearing cross link and piston rod align.

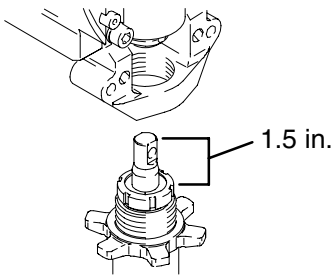


Fig. 18

5. Fig. 16. Use screwdriver: push retaining spring up and push out pin (29).

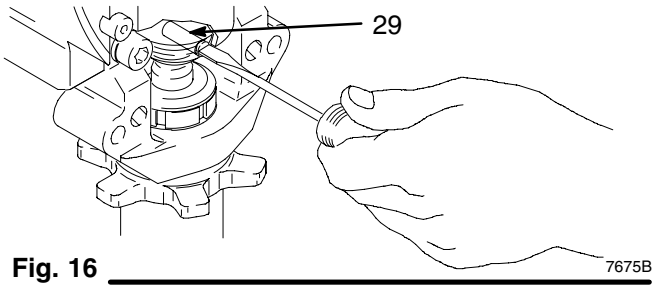


Fig. 16

6. Fig. 17. Loosen locknut by hitting firmly with a 20 oz (maximum) hammer. Unscrew pump.

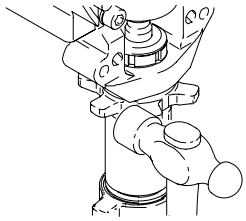


Fig. 17

2. Fig. 16. Push pin (29) into hole. And push retaining spring into groove all the way around connecting rod.

Fig. 19. Screw jam nut down onto pump until nut stops. Screw pump up into bearing housing until it is stopped by jam nut. Back off pump and jam nut to align pump outlet to back. Tighten jam nut by hand, then tap 1/8 to 1/4 turn with a 20 oz (maximum) hammer to approximately 75 ± 5 ft–lb (102 N·m).

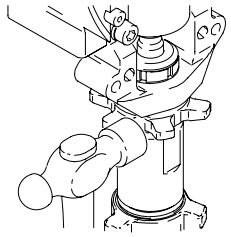


Fig. 19

Fig. 20. Fill packing nut with Graco TSL until fluid flows onto the top of seal.

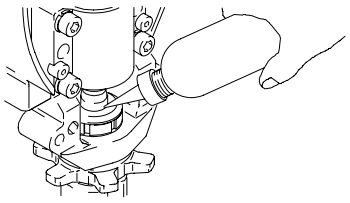
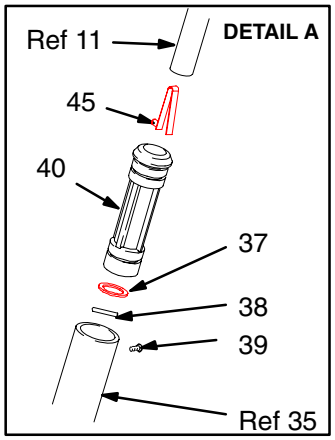


Fig. 20

Parts Drawing – GMax 3900, 5900, 5900HD Hi-Boy Sprayers

Models 233701, 233706 and 233716



△1 Label

△2 See page 20 for the parts.

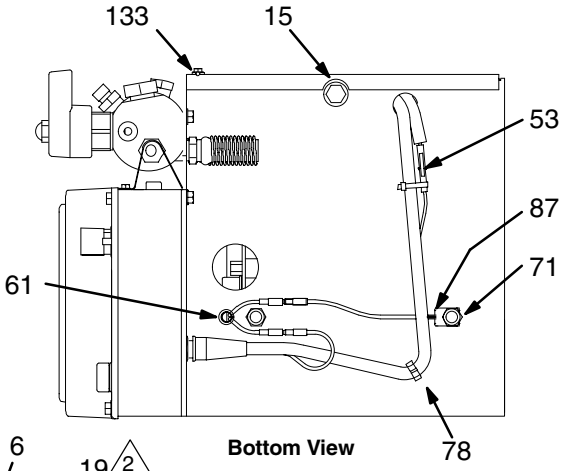
△3 See manual 309277 for the parts.

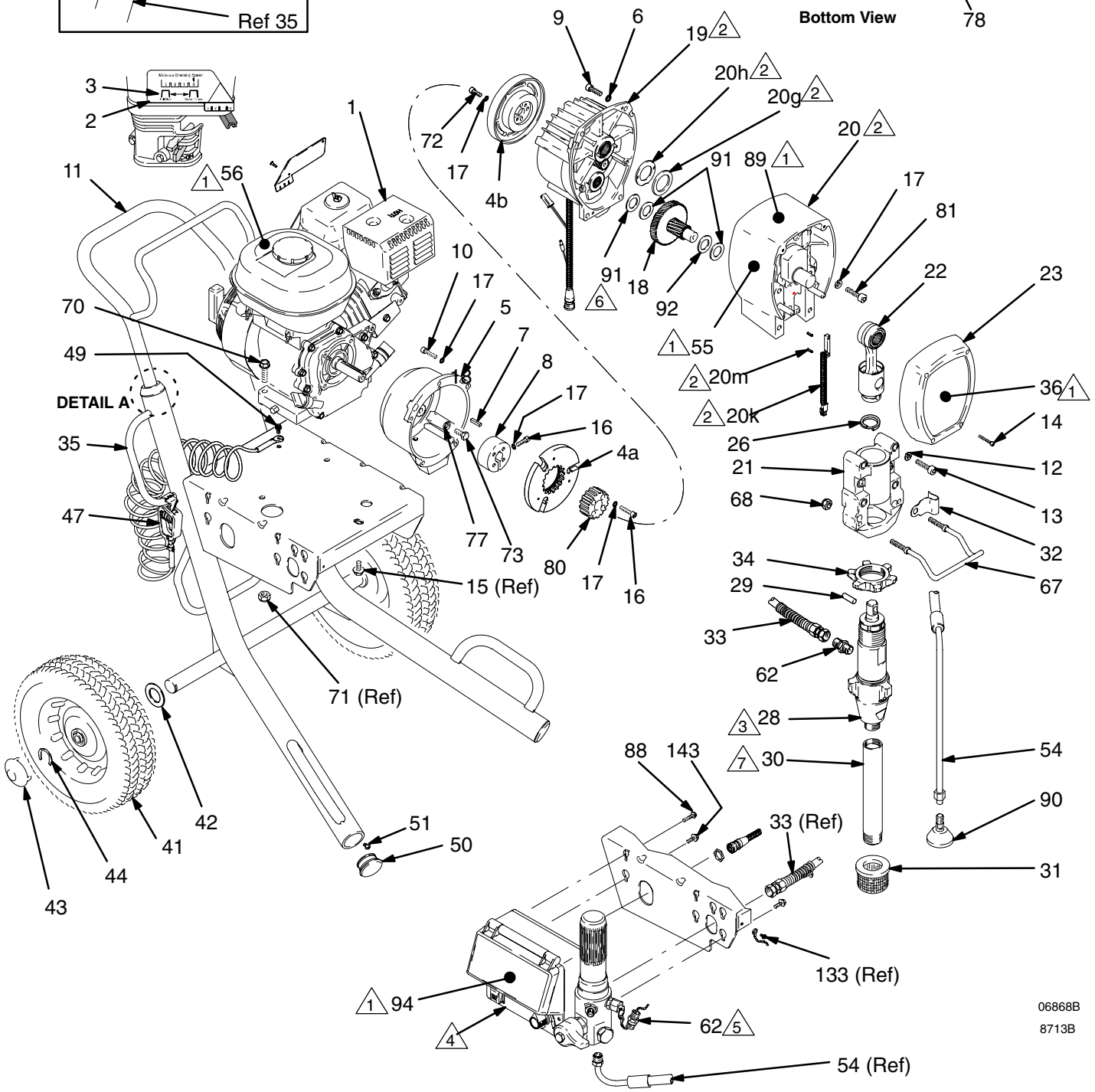
△4 See page 24 for the parts.

△5 Used on GMax 5900, 5900HD

△6 Used on GMax 3900

△7 Used on GMax 3900, 5900





06868B

8713B

Parts List – GMax 3900, 5900, 5900HD Hi-Boy Sprayers

Models 233701, 233706 and 233716*

Ref No.	Part No.	Description	Qty
1		**ENGINE**	
	108879	GMax 3900	1
	114530	GMax 5900, 5900HD	1
2	113084	RIVET, blind	2
3	192014	PLATE, indicator	1
4		**CLUTCH ASSEMBLY**, includes 4a, 4b, 16, 17, 72, 80	
	241109	GMax 3900	1
	241113	GMax 5900, 5900HD	1
4a		.ARMATURE, clutch, 4 in., GMax 3900	1
		.ARMATURE, clutch, 5 in., GMax 5900, 5900HD	1
4b		.ROTOR	
		4 in., GMax 3900	1
		5 in., GMax 5900, 5900HD	1
5		**CLUTCH HOUSING**	
	193540	GMax 3900	1
	193531	GMax 5900, 5900HD	1
6		LOCKWASHER, spring, 1/4 in.	
	105510	GMax 3900	4
	104008	GMax 5900, 5900HD	4
7	183401	KEY, parallel	1
8	193680	CLAMP	1
9		CAPSCREW, socket head, 1/4–20 x 3/4 in.	
	100644	GMax 3900	4
	101864	GMax 5900, 5900HD	4
10	100644	CAPSCREW, socket head, 1/4–20 x 3/4 in.	5
11	245245	CART HANDLE & HOSE RACK	1
12	106115	LOCKWASHER, spring, 3/8 in.	4
13		CAPSCREW, socket head,	
	107210	GMax 3900; 3/8–16 x 1.5 in.	4
	114666	GMax 5900, 5900HD; 3/8–16 x 2.25 in.	4
14		SCREW, self–tap, fil hd	
	114418	GMax 3900, 8–32 x 1 in.	4
	114818	GMax 5900, 8–32 x 1-1/4 in.	4
15	113802	SCREW, flange, hex hd, 3/8–16 x 5/8 in.	1
16	108803	CAPSCREW, sch, 1/4–2 x 1 in.	6
17		LOCKWASHER, spring, 1/4 in.	
	105510	GMax 3900	17
	105510	GMax 5900, 5900HD	11
18		GEAR COMBINATION	
	241439	GMax 3900	1
	241440	GMax 5900, 5900HD	1
19		**PINION ASSEMBLY;** Parts, page 20	
	245398	GMax 3900	1
	245399	GMax 5900, 5900HD	1
20		**DRIVE HOUSING;** Parts, page 20	
	245442	GMax 3900	1
	245443	GMax 5900, 5900HD	1
21		**BEARING HOUSING;** includes 67 and 68	
	240523	GMax 3900	1
	241015	GMax 5900, 5900HD	1
22		**CONNECTING ROD**	
	241008	GMax 3900	1
	241279	GMax 5900, 5900HD	1
23		COVER, HOUSING, DRIVE	
	179899	GMax 3900	1
	241308	GMax 5900, 5900HD	1
26		SPRING, retaining	
	176817	GMax 3900	1
	183169	GMax 5900, 5900HD	1
28		**DISPLACEMENT PUMP**; Manual 309277	
	244197	GMax 3900	1
	244224	GMax 5900	1
	244201	GMax 5900HD	1
29		PIN, straight	
	176818	GMax 3900	1
	183210	GMax 5900, 5900HD	1
30		TUBE, intake	
	192641	GMax 3900	1
	193097	GMax 5900	1
31		STRAINER	
	181072	GMax 3900, 5900	1
	189920	GMax 5900HD	1
32	197124	CLIP, spring	1
33	198847	HOSE, coupled	1
34		NUT, retaining	
	192723	GMax 3900	1
	193031	GMax 5900, 5900HD	1
35		CART FRAME	
	245160	GMax 3900	1
	245162	GMax 5900, 5900HD	1
36	198651	LABEL, identification, GMax 3900	1
	198652	LABEL, identification, GMax 5900	1
	198654	LABEL, identification, GMax 5900HD	1
37	183350	WASHER, plain	2
38	108068	PIN, spring	2
39		SCREW, mch, pn hd	
	109032	GMax 3900, 10–32 x 1/4 in.	4
	108795	GMax 5900, 5900HD, 10–32 x 5/16 in.	4
40		SLEEVE	
	192027	GMax 3900	2
	191084	GMax 5900, 5900HD	2
41		WHEEL, semi–pneumatic	
	198721	GMax 3900	2
	198720	GMax 5900, 5900HD	2
42	116891	WASHER	2
43	104811	HUBCAP	2
44	198723	CLIP, axle	2
45	112827	BUTTON, snap	2
47	237686	GROUNDING CLAMP & WIRE	1
49	112798	SCREW, hex washer hd,, No. 8 x 3/8 in	1.
50	193700	PLUG, tubing; GMax 3900	2
	193682	CAP, end; GMax 5900, 5900HD	2
51	114984	SCREW, mch, pn hd; GMax 3900 only	2
53	103473	STRAP, tie	1
54	244240	HOSE, drain includes 90	1
55▲	194125	LABEL, danger	1
56▲	194126	LABEL, warning	1
61	114678	BUSHING, strain relief	1
62	183461	NIPPLE, GMax 3900	1
	162485	NIPPLE, GMax 5900, 5900HD	2
67	192719	HANGER, pail	1
68	112746	LOCKNUT, 5/16–18	2
70	110837	SCREW, flng, hex hd, 5/16–18 x 1–1/2 in.	2
71	110838	LOCKNUT, heavy hex, 5/16–18	2
72	101682	SCREW, cap, sch	4
73		SCREW, cap, sch	4
	109031	GMax 3900	4
	108842	GMax 5900, 5900HD	4
77		WASHER, lock, spring	
	104008	GMax 3900	4
	100214	GMax 5900, 5900HD	4
78	114687	CLIP, retainer	1
80		HUB, armature	1
81		SCREW	
	107218	GMax 3900	2
	114686	GMax 5900	2
82	206994	THROAT SEAL LIQUID; not shown	1
87	240997	CONDUCTOR, gnd, GMax 5900, 5900HD	1
88	198904	SCREW, threadform	2
89	290228	LABEL, caution	1
90	241920	DEFLECTOR	1
91	114672	WASHER, GMax 3900 (3); 5900, 5900HD	(2)
92	114699	WASHER	1
94	196670	LABEL, control cover	1
133	109575	SCREW, threadform	1
143	112774	SCREW, threadform	2

▲ *Danger & Warning labels, tags, and cards are free*

Parts List & Drawing – Pinion Assembly

Ref No. 19 and 20

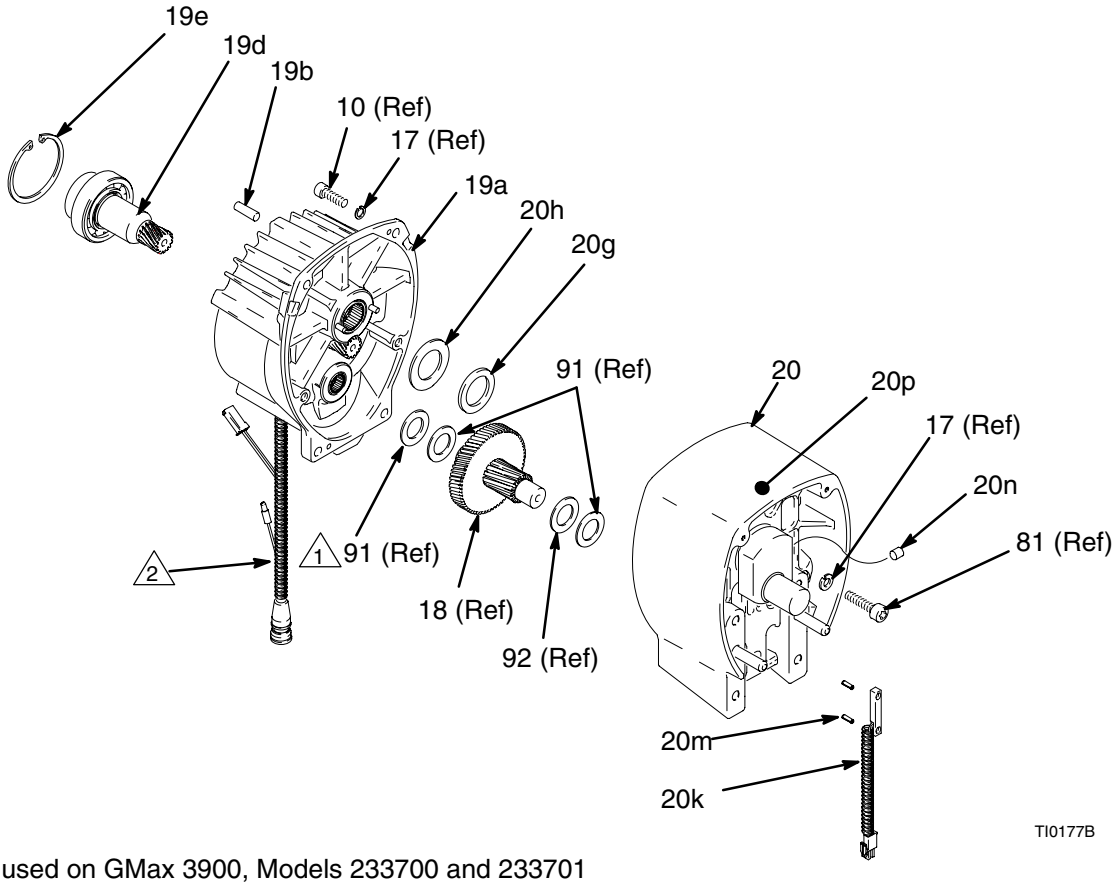
Ref No. 19: Pinion Housing Assembly 245398 for GMax 3900; Pinion Housing Assembly 245399 for GMax 5900, 5900HD

Ref No.	Part No.	Description	Qty
19		PINION HOUSING	1
19a		KIT, repair, coil	
	245268	GMax 3900	1
	245267	GMax 5900, 5900HD	1
19b	105489	PIN	2
19d*		PINION SHAFT	
	241110	GMax 3900	1
	241114	GMax 5900, 5900HD	1
19e*		RETAINING RING, large	
	113094	GMax 3900	1
	112770	GMax 5900, 5900HD	1

**Must be ordered separately.*

Ref No. 20: Drive Housing Assembly 245442 for GMax 3900; Drive Housing Assembly 245443 for GMax 5900, 5900HD

Ref No.	Part No.	Description	Qty
20		DRIVE HOUSING	1
20g		WASHER	
	107089	GMax 3900	1
	194173	GMax 5900, 5900HD	1
20h		WASHER	
	116191	GMax 3900	1
	116192	GMax 5900, 5900HD	1
20k	116806	SWITCH, reed	1
20m	116838	PIN, spring	2
20n	116618	MAGNET	1
20p	15A622	LABEL, WatchDog	1



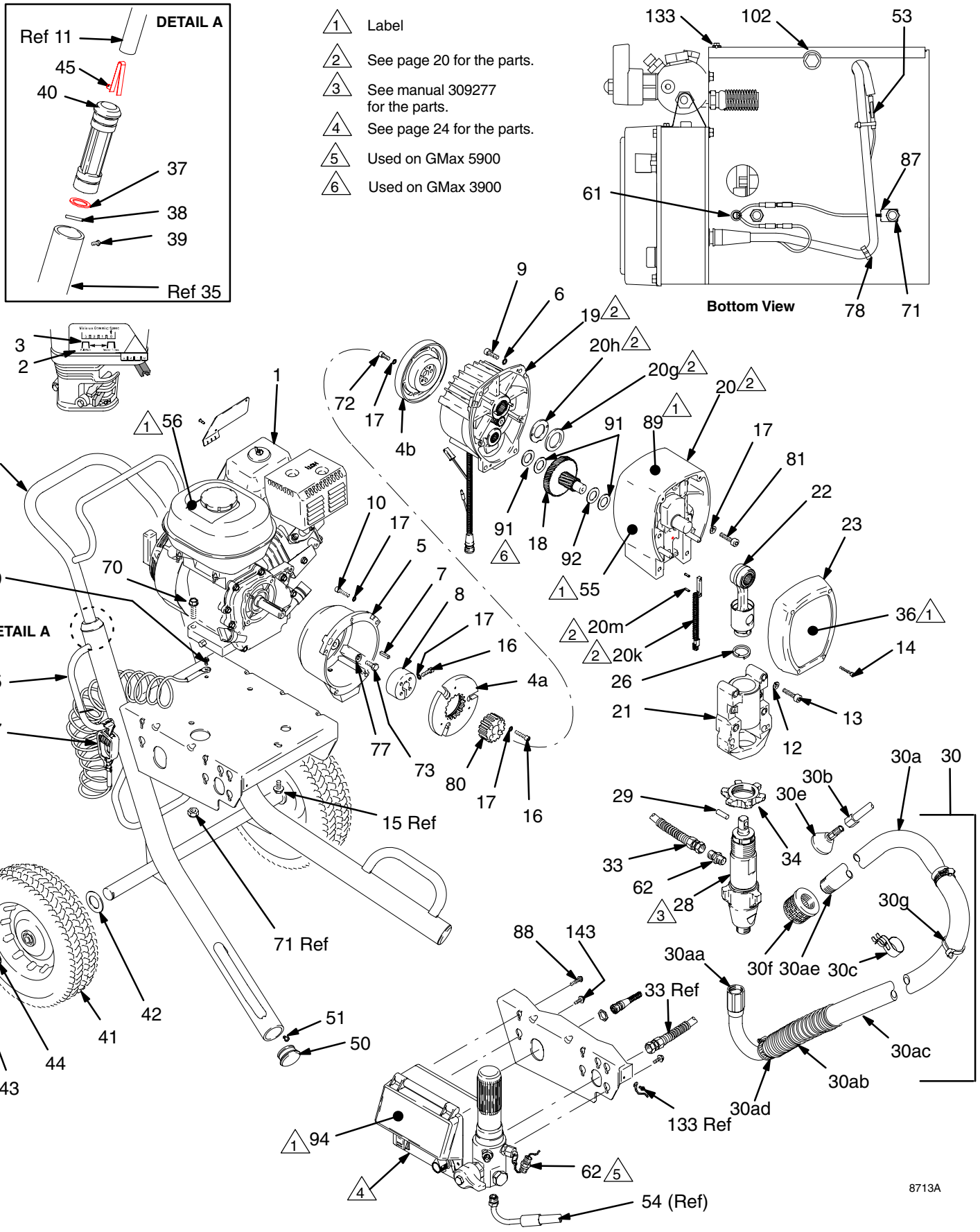
1 Only used on GMax 3900, Models 233700 and 233701

2 Pinion housing assembly (19) includes clutch field and connector

Notes

Parts Drawing – GMax 3900 and GMax 5900 Lo-Boy Sprayers

Models 233700 and 233705



Parts List – GMax 3900 and GMax 5900 Lo-Boy Sprayers

Models 233700 and 233705

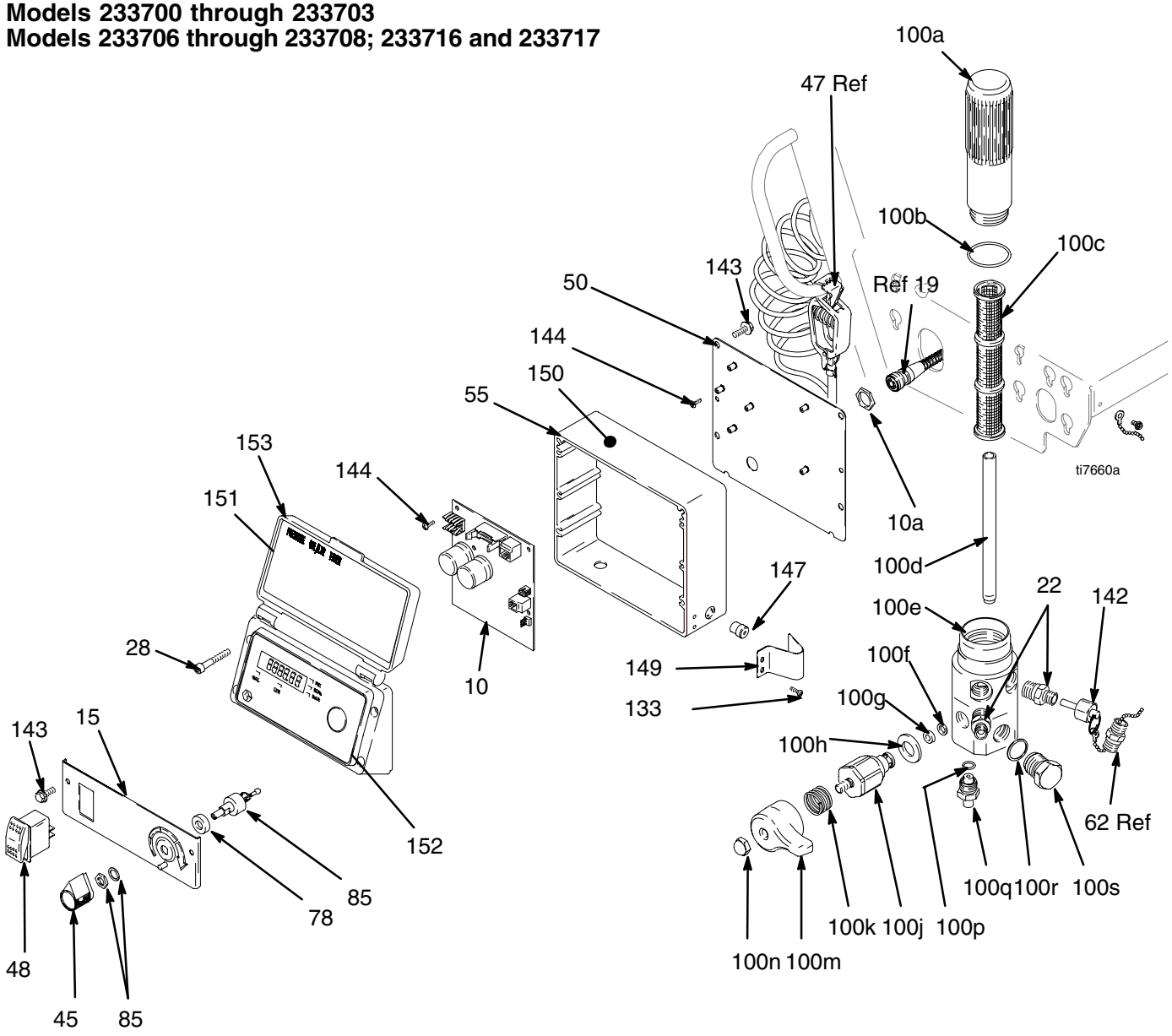
Ref No.	Part No.	Description	Qty
1		**ENGINE**	
	108879	GMax 3900	1
	114530	GMax 5900	1
2	113084	RIVET, blind	2
3	192014	PLATE, indicator	1
4		**CLUTCH ASSEMBLY**, includes 4a, 4b, 16, 17, 72, 80	
	241109	GMax 3900	1
	241113	GMax 5900	1
4a		.ARMATURE, clutch, 4 in., GMax 3900	1
		.ARMATURE, clutch, 5 in., GMax 5900	1
4b		.ROTOR	
		4 in., GMax 3900	1
		5 in., GMax 5900	1
5		**CLUTCH HOUSING**	
	193540	GMax 3900	1
	193531	GMax 5900	1
6		LOCKWASHER, spring, 1/4 in.	
	105510	GMax 3900	4
	104008	GMax 5900	4
7	183401	KEY, parallel	1
8	193680	CLAMP	1
9		CAPSCREW, socket head, 1/4–20 x 3/4 in.	
	100644	GMax 3900	4
	101864	GMax 5900	4
10	100644	CAPSCREW, socket head, 1/4–20 x 3/4 in.	5
11	245245	CART HANDLE & HOSE RACK	1
12	106115	LOCKWASHER, spring, 3/8 in.	4
13		CAPSCREW, socket head,	
	107210	GMax 3900; 3/8–16 x 1.5 in.	4
	114666	GMax 5900; 3/8–16 x 2.25 in.	4
14	114418	SCREW, self–tap, fil hd, 8–32 x 1 in.	4
15	113802	SCREW, flange, hex hd, 3/8–16 x 5/8 in.	1
16	108803	CAPSCREW, sch, 1/4–2 x 1 in.	6
17		LOCKWASHER, spring, 1/4 in.	
	105510	GMax 3900	17
	105510	GMax 5900	11
18		GEAR COMBINATION	
	241439	GMax 3900	1
	241440	GMax 5900	1
19		**PINION ASSEMBLY;** Parts, page 20	
	245398	GMax 3900	1
	245399	GMax 5900	1
20		**DRIVE HOUSING;** Parts, page 20	
	245442	GMax 3900	1
	245443	GMax 5900	1
21		**BEARING HOUSING;** includes 67 and 68	
	240523	GMax 3900	1
	241015	GMax 5900	1
22		**CONNECTING ROD**	
	241008	GMax 3900	1
	241279	GMax 5900	1
23		COVER, HOUSING, DRIVE	
	179899	GMax 3900	1
	241308	GMax 5900	1
26		SPRING, retaining	
	176817	GMax 3900	1
	183169	GMax 5900	1
28		**DISPLACEMENT PUMP**; Manual 309277	
	244197	GMax 3900	1
	244224	GMax 5900	1
29		PIN, straight	
	176818	GMax 3900	1
	183210	GMax 5900	1
30	245507	TUBE, suction, 5 gallon (assembly)	1
30a	241124	• TUBE, suction, 5 gallon (201) includes 30aa – 30ae	1 1
30aa	240513	• • SWIVEL, tube, inlet	1
30ab	176450	• • GUARD, hose	1
30ac	194306	• • HOSE, fluid	1
30ad	101818	• • CLAMP, hose	1
30ae	170957	• • TUBE, suction	1
30b	245611	• KIT, repair, return line (includes 30e)	1
30c	196723	• CLIP, spring	1
30e	241920	• DEFLECTOR	1
30f	181072	• STRAINER	1
30g	114958	• STRAP, tie	1
33	198847	HOSE, coupled	1
34		NUT, retaining	
	192723	GMax 3900	1
	193031	GMax 5900	1
35		CART FRAME	
	245161	GMax 3900	1
	245162	GMax 5900	1
36	198651	LABEL, identification, GMax 3900	1
	198652	LABEL, identification, GMax 5900	1
37	183350	WASHER, plain	2
38	108068	PIN, spring	2
39		SCREW, mch, pn hd	
	109032	GMax 3900, 10–32 x 1/4 in.	4
	108795	GMax 5900, 10–32 x 5/16 in.	4
40		SLEEVE	
	192027	GMax 3900	2
	191084	GMax 5900	2
41		WHEEL, semi–pneumatic	
	198721	GMax 3900	2
	198720	GMax 5900	2
42	116891	WASHER	2
43	104811	HUBCAP	2
44	198723	CLIP, axle	2
45	112827	BUTTON, snap	2
47	237686	GROUNDING CLAMP & WIRE	1
48	116752	SWITCH, rocker	1
49	112798	SCREW, hex washer hd,, No. 8 x 3/8 in	1.
50	193700	PLUG, tubing; GMax 3900	2
	193682	CAP, end; GMax 5900	2
51	114984	SCREW, mch, pn hd; GMax 3900 only	2
53	103473	STRAP, tie	1
55▲	194125	LABEL, danger	1
56▲	194126	LABEL, warning	1
61	114678	BUSHING, strain relief	1
62	183461	NIPPLE, GMax 3900	1
	162485	NIPPLE, GMax 5900	2
68	112746	LOCKNUT, 5/16–18	2
70	110837	SCREW, flng, hex hd, 5/16–18 x 1–1/2 in.	2
71	110838	LOCKNUT, heavy hex, 5/16–18	2
72	101682	SCREW, cap, sch	4
73		SCREW, cap, sch	4
	109031	GMax 3900	4
	108842	GMax 5900	4
77		WASHER, lock, spring	
	104008	GMax 3900	4
	100214	GMax 5900	4
78	114687	CLIP, retainer	1
80		HUB, armature	1
81		SCREW	
	107218	GMax 3900	2
	114686	GMax 5900	2
82	206994	THROAT SEAL LIQUID; not shown	1
87	240997	CONDUCTOR, gnd, GMax 5900	1
88	198904	SCREW, threadform	2
89	290228	LABEL, caution	1
91	114672	WASHER, GMax 3900 (3); 5900	(2)
92	114699	WASHER	1
94	196670	LABEL, control cover	1
133	109575	SCREW, threadform	1
143	112774	SCREW, threadform	2

▲ *Danger & Warning labels, tags, and cards are free*

Parts Drawing – Sprayer

GMax 3900, 5900 and 5900HD Sprayers

Models 233700 through 233703
Models 233706 through 233708; 233716 and 233717



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Parts List – Sprayer

Models 233700 through 233703; 233705 through 233707; 233716 and 233717

REF NO.	PART NO.	DESCRIPTION	QTY
10	**245394**	**BOARD, PC**	**1**
		Includes 10a	
10a		NUT, nylon	1
15	198553	PANEL, control	1
22	164672	ADAPTER	2
28	116252	SCREW, #8 taptite, phil	4
45	116167	KNOB, potentiometer	1
48	116752	SWITCH, rocker, (spst)	1
50	198534	PLATE, control	1
55	198548	HOUSING, control	1
85	241443	POTENTIOMETER, pressure control	1
78	198650	SPACER, shaft	1
		FILTER, fluid	1
100	245396	KIT, repair, filter	1
100a	196675	BOWL, filter	1
100b	104361	O-RING	1
100c	244067	STRAINER, mesh, 60	1
100d	196786	TUBE, diffuser	1
100e	245401	KIT, repair, filter base	1
100f	193710	SEAL, valve	1
100g	193709	SEAT, valve	1
100h	114797	GASKET	1
100j	245103*	VALVE	1
100k	114708	SPRING, compression	1
100m	194102	HANDLE, valve	1
100n	114688	NUT, cap, hex hd	1
100p	111457	O-RING	1
100q	243222	TRANSDUCER, pressure control	1
		includes 100p	
100r	197055	GASKET, plug	1
100s	196781	PLUG, AutoClean	1
133	109575	SCREW, threadformer	2
142	245474	PLUG, packless	1
143	112774	SCREW, mach	4
144	114331	SCREW, pnhd 6–32	6
147	114296	BUSHING, step	1
149	198994	GUARD, transducer	1
150▲	189246	LABEL, warning	1
151	198884	LABEL, instruction, GMax	1
152	198648	LABEL, GMax, LCD	1
153	245393	COVER, digital display	1
		Includes 28, 94, 151, 152	

* Drain valve replacement kit 245103 includes 100f, g, h, k, m, n

▲ Replacement warning labels may be ordered free of charge

Pressure Control Wiring Diagram

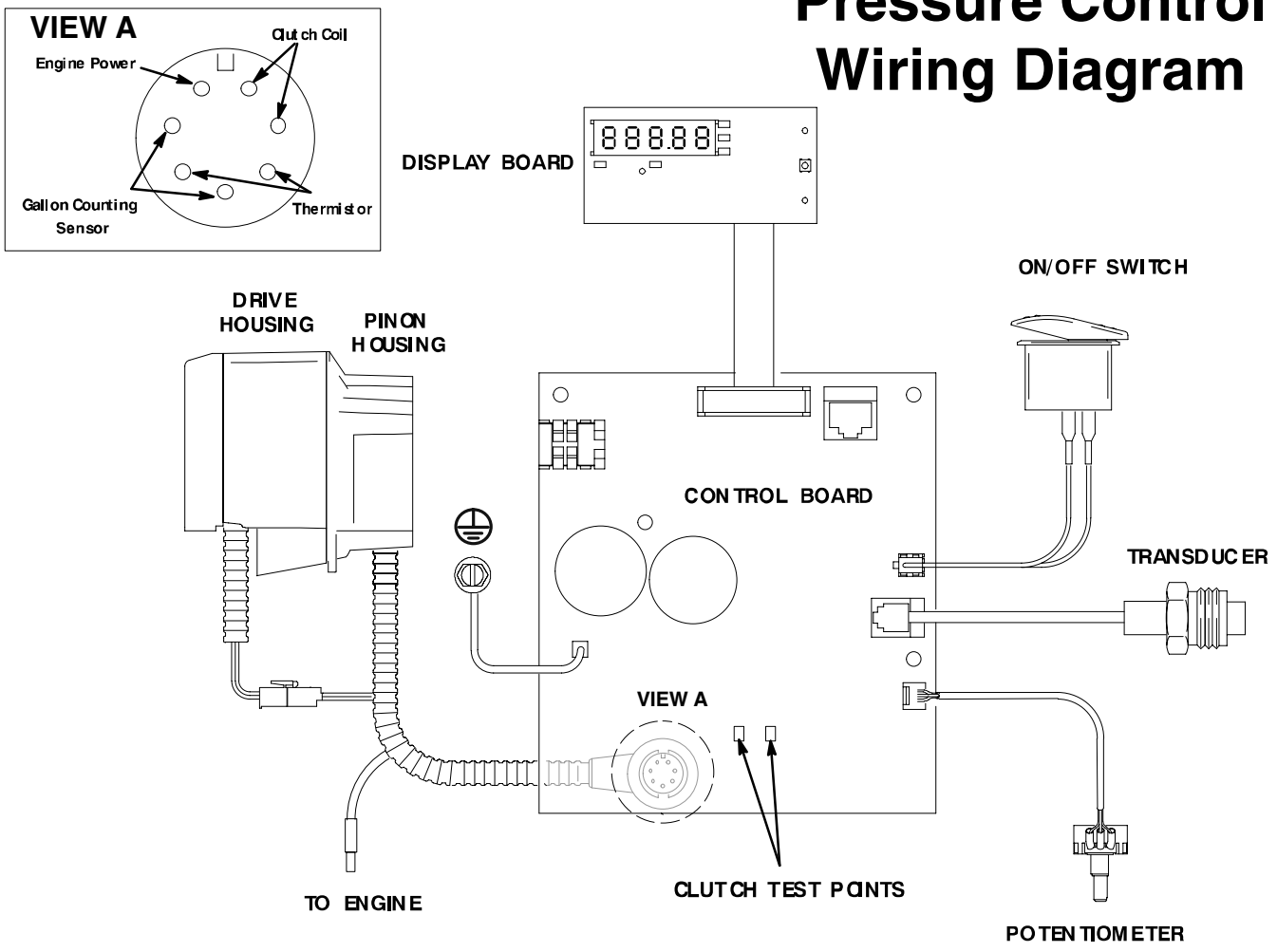


Fig. 21

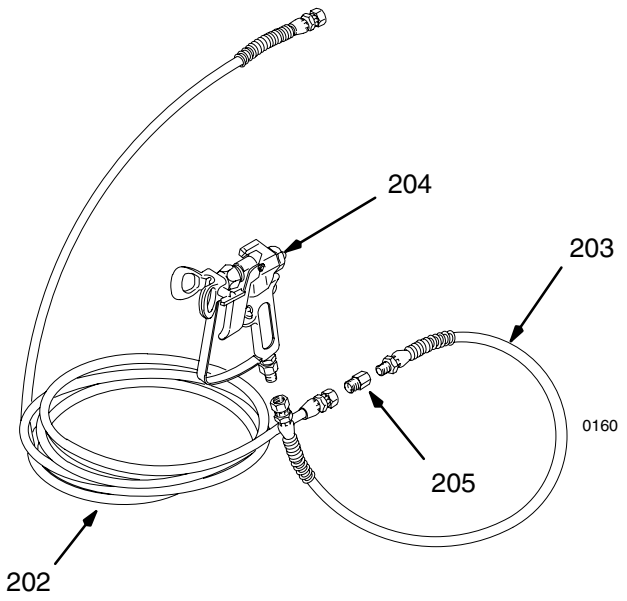
Parts List/Drawing – Sprayers with RAC X Tip, Gun & Hose

Models 233702, 233703, 233707, 233708, 233717

GMax 3900, 5900, 5900HD Airless Paint Sprayers
Includes items 201 to 204

Ref No.	Part No.	Description	Qty
201	233701	GM3900 Hi-Boy Sprayer See parts list on page 18	1
	233706	GM5900 Hi-Boy Sprayer See parts list on page 18	1
	233716	GM5900HD Hi-Boy Sprayer See parts list on page 18	1
	233700	GM3900 Lo-Boy Sprayer See parts list on page 23	1
	233705	GM5900 Lo-Boy Sprayer See parts list on page 23	1
202	240794	HOSE, grounded, nylon; 1/4 in. ID; cpld 1/4 npsm(fbe); 50 foot (15 m); spring guards both ends 3300 psi (227 bar, 27.7 MPa)	1
	240797*	HOSE, grounded, nylon; 3/8 in. ID; cpld 1/4 npsm(fbe); 50 foot (15 m); spring guards both ends 3300 psi (227 bar, 27.7 MPa)	1
203	238358	HOSE, grounded, nylon; 3/16 in. ID; cpld 1/4 npsm(m) x 1/4 npsm(f) swivel; 3 foot (0.9 m); spring guards both ends	1
	241735*	HOSE, grounded, nylon; 1/4 in. ID; cpld 1/4 npsm(m) x 1/4 npsm(f) swivel; 3 foot (0.9 m); spring guards both ends	1
204	246220	CONTRACTOR II SPRAY GUN Includes RAC X 517–size SwitchTip™ and HandTite™ Guard See 309639 for parts	1
	241705*	TEXTURE SPRAY GUN Includes GHD527 Heavy Duty SwitchTip and Guard See 308491 for parts	1
205	159841*	BUSHING, 3/8 X 14 IN.	1

* 5900HD only

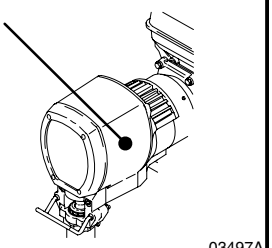


Accessories

DANGER LABELS

An English language DANGER label is on your sprayer. If you have painters who do not read English, order one of the following labels to apply to your sprayer. The drawing shows the best placement of these labels for good visibility.

Order the labels from your Graco distributor.



French	**194931**
Spanish	**194932**
German	**194933**
Greek	**194934**
Korean	**194935**
English	**194125**

Displacement Pump Repair Kits

Packing repair kits.

GMax 3900	**244196**
GMax 5900, 5900HD	**244198**

Technical Data

Honda GX120 Engine
- Power Rating @ 3700 rpm
  - ANSI . . . . . 4.0 Horsepower
  - DIN 6270B/DIN 6271
    - NA . . . . . 2.1 Kw – 2.8 Ps
    - NB . . . . . 2.6 Kw – 3.6 Ps

Honda GX160 Engine
- Power Rating @ 3700 rpm
  - ANSI . . . . . 5.5 Horsepower
  - DIN 6270B/DIN 6271
    - NA . . . . . 2.9 Kw – 4.0 Ps
    - NB . . . . . 3.6 Kw – 4.9 Ps

Maximum working pressure . . . . . 3300 psi (227 bar, 22.7 MPa)

Noise Level
- Sound power . . . . . 105 dBa per ISO 3744
- Sound pressure . . . . . 96 dBa measured at 3.1 feet (1 m)

Cycles/gallon (liter)
- GMax3900 . . . . . 182 (48)
- GMax5900, 5900HD 93 (25)

Maximum delivery rating
- GMax3900 . . . . . 1.15 gpm (4.4 liter/min)
- GMax5900, 5900HD . . . . . 1.5 gpm (5.7 liter/min)

Maximum tip size
- GMax3900 . . . . . 1 gun with 0. 034 in. tip
2 guns with 0.024 in. tip
3 guns with 0. 017 in. tip
- GMax5900, 5900HD . . . . . 1 gun with 0. 041 in. tip
2 guns with 0.028 in. tip
3 guns with 0. 022 in. tip
4 guns with 0. 019 in. tip

Inlet paint strainer . . . . . 16 mesh (1190 micron) stainless steel screen, reusable

Outlet paint filter . . . . . 60 mesh (250 micron) stainless steel screen, reusable

Pump inlet size . . . . . 3/4 in. npt (m)

Fluid outlet size . . . . . 1/4 npsm from fluid filter

Wetted parts . . . . . zinc-plated carbon steel, PTFE, Nylon, polyurethane, UHMW polyethylene, FKM, POM, leather, aluminum, tungsten carbide,nickle- and zinc-plated carbon steel, stainless steel, chrome plating

Dimensions

GMax 3900

Model 233701, 233703

Hi-Boy without hose or gun

Weight (dry, without packaging) . . . . . 110 lb (49.9 kg)
Height . . . . . 40 in. (101.6 cm)
Length . . . . . 37 in. (94 cm)
Width . . . . . 22 in. (55.9 cm)

Model 233700, 233702

Lo-Boy Cart without hose or gun

Weight (dry, without packaging) . . . . . 110 lb (49.9 kg)
Height . . . . . 40 in. (101.6 cm)
Length . . . . . 37 in. (94 cm)
Width . . . . . 22 in. (55.9 cm)

GMax 5900, 5900HD

Model 233706, 233708, 233716 and 233717

Hi-Boy without hose or gun

Weight (dry, without packaging) . . . . . 150 lb (68 kg)
Height . . . . . 41 in. (104.1 cm)
Length . . . . . 39 in. (99.1 cm)
Width . . . . . 22 in. (55.9 cm)

Model 233705, 233707

Lo-Boy without hose or gun

Weight (dry, without packaging) . . . . . 150 lb (68 kg)
Height . . . . . 41 in. (104.1 cm)
Length . . . . . 39 in. (99.1 cm)
Width . . . . . 22 in. (55.9 cm)

Graco Warranty

Graco warrants all equipment manufactured by Graco and bearing its name to be free from defects in material and workmanship on the date of sale by an authorized Graco distributor to the original purchaser for use. With the exception of any special, extended, or limited warranty published by Graco, Graco will, for a period of twelve months from the date of sale, repair or replace any part of the equipment determined by Graco to be defective. This warranty applies only when the equipment is installed, operated and maintained in accordance with Graco's written recommendations.

This warranty does not cover, and Graco shall not be liable for general wear and tear, or any malfunction, damage or wear caused by faulty installation, misapplication, abrasion, corrosion, inadequate or improper maintenance, negligence, accident, tampering, or substitution of non–Graco component parts. Nor shall Graco be liable for malfunction, damage or wear caused by the incompatibility of Graco equipment with structures, accessories, equipment or materials not supplied by Graco, or the improper design, manufacture, installation, operation or maintenance of structures, accessories, equipment or materials not supplied by Graco.

This warranty is conditioned upon the prepaid return of the equipment claimed to be defective to an authorized Graco distributor for verification of the claimed defect. If the claimed defect is verified, Graco will repair or replace free of charge any defective parts. The equipment will be returned to the original purchaser transportation prepaid. If inspection of the equipment does not disclose any defect in material or workmanship, repairs will be made at a reasonable charge, which charges may include the costs of parts, labor, and transportation.

THIS WARRANTY IS EXCLUSIVE, AND IS IN LIEU OF ANY OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO WARRANTY OF MERCHANTABILITY OR WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE.

Graco's sole obligation and buyer's sole remedy for any breach of warranty shall be as set forth above. The buyer agrees that no other remedy (including, but not limited to, incidental or consequential damages for lost profits, lost sales, injury to person or property, or any other incidental or consequential loss) shall be available. Any action for breach of warranty must be brought within two (2) years of the date of sale.

Graco makes no warranty, and disclaims all implied warranties of merchantability and fitness for a particular purpose in connection with accessories, equipment, materials or components sold but not manufactured by Graco. These items sold, but not manufactured by Graco (such as electric motors, switches, hose, etc.), are subject to the warranty, if any, of their manufacturer. Graco will provide purchaser with reasonable assistance in making any claim for breach of these warranties.

In no event will Graco be liable for indirect, incidental, special or consequential damages resulting from Graco supplying equipment hereunder, or the furnishing, performance, or use of any products or other goods sold hereto, whether due to a breach of contract, breach of warranty, the negligence of Graco, or otherwise.

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ADDITIONAL WARRANTY COVERAGE

Graco does provide extended warranty and wear warranty for products described in the "Graco Contractor Equipment Warranty Program".

TO PLACE AN ORDER, contact your Graco distributor, or call **1–800–690–2894** to identify your closest distributor.

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